

causing the laser diode to emit pulses of light and control means operatively connected with the energizing circuit for adjusting an intensity of the light spot by pulse width modulation of the laser diode. Wiklund discloses the use of an LED as the light source for emitting a light beam.

The Examiner relies upon Matthews et al as teaching a firearm sight comprising a light source being a laser assembly. It is the Examiner's position that it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a light source being a laser diode as taught by Matthews et al in the optical sighting device disclosed by Wiklund in order to enhance the device by providing a homogeneous collimated ray of light and to increase the reliability of the device by using a light source better suited for battery operated device and low voltage applications.

The Applicant disagrees with the Examiner's position for the following reasons.

It is true that Wiklund discloses a sight which creates a light spot on a reflecting surface of a front lens of the sight, and includes a control means for adjusting the intensity of the light spot depending on the ambient light, but the Examiner is incorrect when she states that the control means is for adjusting "a pulse width modulation of the laser diode source". Furthermore, as admitted by the Examiner, Wiklund does not even disclose a laser

diode but rather an LED.

Wiklund controls the intensity of the light spot by changing the frequency of the pulsating electric power so as to determine the flushing frequency of the light source. Wiklund indicates that the flushing and variation of the luminance of the light spot depending on the ambient light can be accomplished in many different ways, but the reference does not indicate that this could be done by pulse width modulation.

Matthews et al disclose a firearm sight which creates an aiming mark on the target by means of a laser diode. This differs from the sight of the present invention wherein the laser diode is placed in focus of the front lens which has a partly reflecting surface which thus reflects only wave lengths in a small band around the emitted laser wave length to form an aiming point only on the front lens and not on the target. It is necessary to vary the intensity of the aiming point in a very wide range (ratio at least 1:10000 between the lowest and brightest settings). The laser diode functions like an LED until a certain current level is reached. Then, the laser diode starts to function in the laser mode and thus to convert electrical power to light power in a much more efficient manner. Varying the intensity by changing the current in the laser mode results in a change of the intensity of the light from the laser diode less than a factor of 10. The inventors in the present application have addressed this difficult

problem by applying pulse width modulation. The time during which the laser diode is activated is changed but the current is still kept high enough for the laser to be in the power efficient laser mode.

Now turning to the combination of Wiklund with Matthews et al, it is the Applicant's position that the Examiner's proposed combination of elements is flawed and would fail to result in the invention as claimed. The laser beam emitting device of Matthews et al is activated through a linking means with the cocking device of the firearm. Thus, it would not appear that the replacement of the LED in the Wiklund sight with the laser beam emitting device of Matthews et al would be a simple substitution. It would seem that a proper combination of the references would require the replacement of the sight of Wiklund with the entire device 10 of Matthews et al as well as a means to link the aiming assistance device with the firearm. This combination would fail to result in the optical sight of the claimed invention.

For the reasons set forth above, it is the Applicant's position that it is unobvious for one having ordinary skill in the art to provide a laser diode as taught by Matthews in a sight of the type described by Wiklund and to produce the light spot forming the aiming point, by a laser diode, or to control the intensity of the light spot by pulse width modulation.

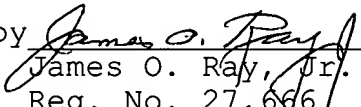
Accordingly, it is respectfully requested that the rejection

of claims 15-21 under 35 USC 103(a) as being unpatentable over Wiklund (3,963,356) in view of Matthews et al (4,313,273) be withdrawn as the combination set forth by the Examiner fails to render these claims obvious.

CONCLUSION

In view of the foregoing arguments and amendments, Applicant believes that the application meets all applicable statutory and regulatory requirements. Accordingly, Applicant respectfully requests allowance of all claims remaining in the application. If the Examiner has any questions regarding this amendment and/or believes that a telephone interview would assist in the advancement of this case to allowance, he/she is invited to contact the undersigned Agent for Applicant.

Respectfully submitted,

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